RMS WATER SYSTEM CRITERIA

1. *Level of Severity I occurs when the water delivery system is projected to be operating at design capacity within seven years.*

2. *Level of Severity II occurs when the water delivery system is projected to reach design capacity within the next five years.*

3. *Level of Severity III occurs when the water delivery system reaches its design capacity.*

COUNTY OPERATED WATER DELIVERY SYSTEMS

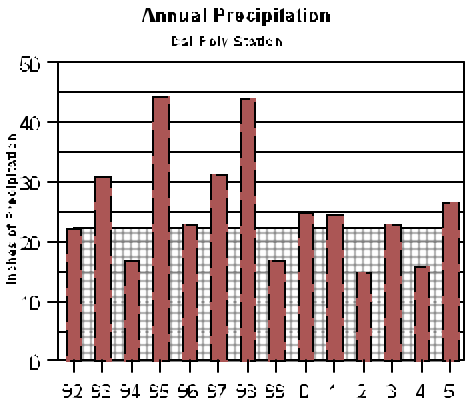
Water delivery systems consist of pumps, mains and storage facilities. County Public Works oversees several waterworks districts and County Service Areas (CSA) within the unincorporated areas of the county. Water for other communities is provided by community service districts or private water companies.

INDIVIDUAL WELLS

The San Luis Obispo County Division of Environmental Health is responsible under the provisions of Section 4.019.9 of the California Health and Safety Code for the regulation of water systems which fall under the state criteria of Public Water Systems. In 1991, the State assumed responsibility for regulation of these systems. However, budget problems have prevented the state from taking over as the actual regulating entity, and the State has contracted with County Health for continuation of these services. Environmental Health will continue to regulate systems with two to four connections under provisions of the County Code. Environmental Health also permits individual domestic wells. Between 1979 and 1997, more than 9,000 domestic wells were constructed in the county, an average of more than 500 per year.

COMMUNITY SPECIFIC WATER INFORMATION

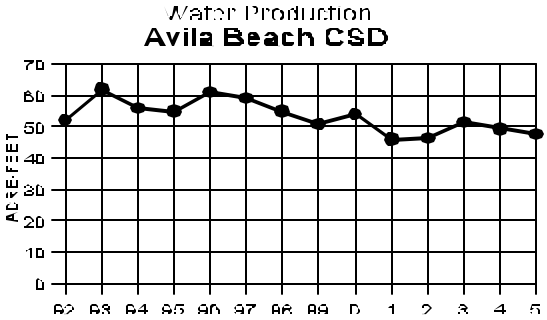
Community water use fluctuates from year to year, based on such factors as population growth and the amount of natural rainfall. In unusually wet years, water consumers use less community water to maintain residential landscapes. In dry years, more community water is needed for this purpose. Rainfall totals for the 1997-98



water year were among the highest on record, resulting in reduced consumption of community water for most local systems. Until last year, annual totals averaged more than two inches less than normal and water use by local systems increased in relation to increased development. **Last year, rainfall was about 19 percent higher than average. For most community systems, customers were able to reduce the amount of water applied to residential landscapes and overall system production was significantly lower than the prior year.**

Avila Beach

Avila Beach receives an allocation of surface water from Lopez Lake. Avila Beach reached the limit of its dependable water supply in 1977, at which time the Water District's Board of Directors enacted a moratorium on issuance of will-serve notices to restrict further development in the community. The 1987-92 drought provided information about the reliability of Lopez Reservoir as a source of supply. The District was able to quantify its minimum entitlement to a portion of Lopez Lake surplus water, and it considers this surplus as part of its regular annual supply. Thus, in April, 1993, the water district Board of Directors lifted the 16-year moratorium on the issuance of will-serve letters. To accommodate future demand, the Avila Beach CWD contracted for 100 acre-feet from the State Water Project. In 1996, the water district was re-organized as the Avila Beach Community Services District. In 2002, a 690,000 gallon water tank was completed to increase the community's fire-fighting capacity.

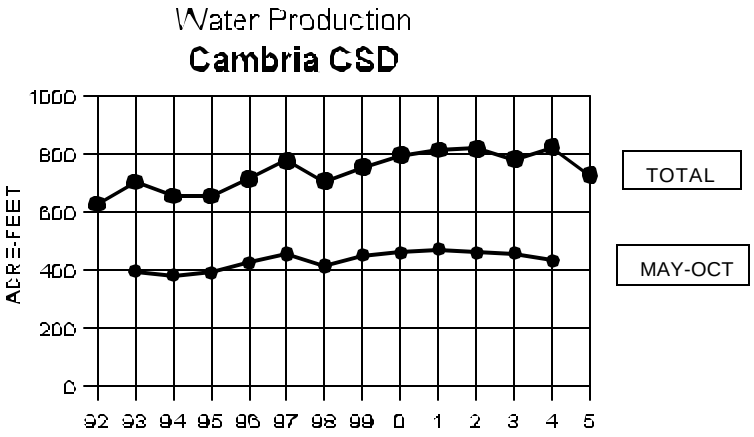


The Arroyo Grande Creek Habitat Conservation Plan (HCP) currently being developed may reduce or eliminate the amount of surplus water now available to Lopez contractors. Also, since the Avila CSD does not participate in the drought buffer program, reliability of its State Water allocation is only about 75%. It may not be possible to rely on the full availability of these two sources. **The draft HCP is currently being reviewed by U.S. Fish and Wildlife and by other regulatory agencies.**

Because the water moratorium precluded new development in Avila Beach for so long, there is no recent growth rate by which to calculate a level of severity for the community. However, with the availability of state water, total supply is considerably greater than current demand. Even with resumption of development following the cleanup, supply should be sufficient for the foreseeable future.

Recommended Level of Severity: None

Cambria



Cambria's water supply is vulnerable to drought because the groundwater basins provide the only supply of water during the dry season and because groundwater storage capacity is small relative to demand. Some portions of the Santa Rosa Creek basin are contaminated with MTBE, limiting the availability of well sites. The Cambria Community Services District implemented a mandatory conservation program from 1990 to 1993 that allowed water production to remain within the limits of dependable supply during the multi-year drought. Since then, the number of dwelling units in the community has increased by over 20 percent and year-round water demand has increased by 17 percent. This suggests that the average Cambria household may have reduced water use by about 2.7 percent during the past ten years. However, the increase in total demand makes the community less able to endure a long-term drought with only partial recharge of its aquifers. In addition, conversion of some agricultural operations to crops with higher evapotranspiration losses could further reduce the amount of water available to the CSD.

The Cambria water supply situation is fully discussed on pages 13 to 17 of this report.

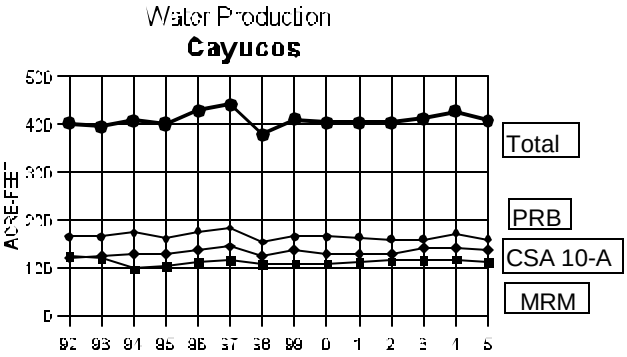
Cambria is located in a wooded area with high fuel loads and fire safety is a major concern. To improve fire-fighting capabilities, the CCSD is phasing upgrades to its water distribution system. These upgrades include elimination of piping bottlenecks to allow increased fire flows and additional storage tank capacity. During 2005, the CCSD completed a new pipeline across the west ranch, which now loops the water distribution system between the Lodge Hill and Seaclift Estates/Park Hill neighborhoods. The District is also in the process of replacing its Pine Knolls water tanks with new tanks that meet current seismic design standards and are also adequately sized. Since the Pine Knolls tanks are not yet completed, level of severity III is recommended for the CCSD's water system.

Recommended Level of Severity: III

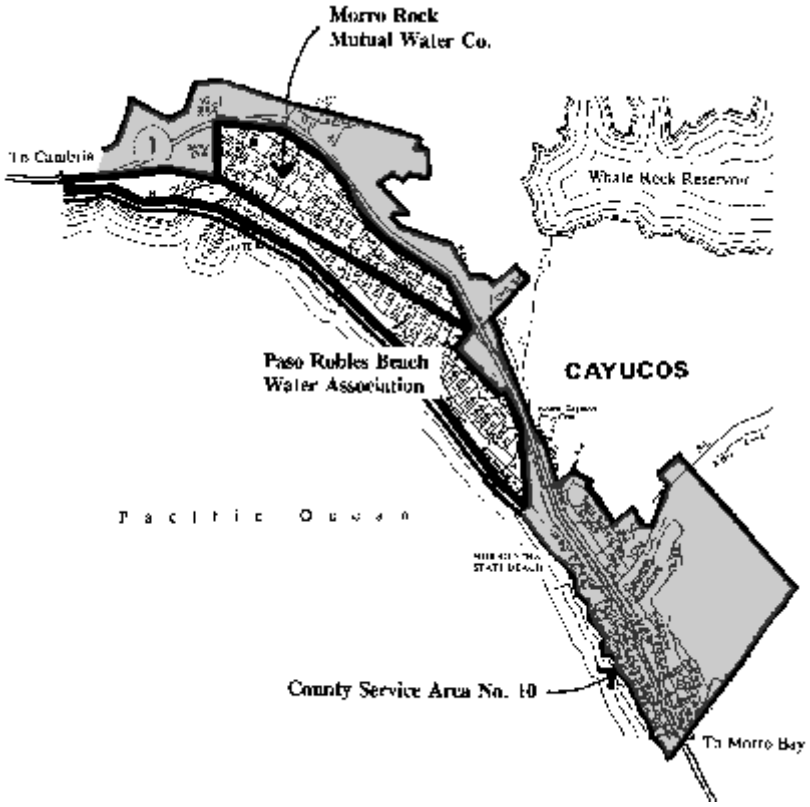
2005
UPDATE

Permits are being sought to replace storage tanks in the Pine Knolls area to improve the district's fire-fighting capability. Construction of the tanks is pending review and approval by the Coastal Commission. #

Cayucos



Cayucos receives water service from three local purveyors: Morro Rock Mutual Water Company (MRM), Paso Robles Beach Water Company (PRB) and County Service Area #10-A These districts, along with the Cayucos Cemetery District, have a 600 acre-feet per year entitlement from Whale Rock Reservoir. In 1985, the Board of Supervisors imposed a building moratorium on the community because water use had reached its available supply. Water conservation programs have kept Cayucos within its allocation without the need for rationing. In 1993, in recognition of these conservation efforts and water system improvements resulting in more efficient use of the available supply, the Board lifted the moratorium, and the three water purveyors adopted a management plan allowing for phased construction of the equivalent of 159 new residential units. The supply is re-evaluated annually, based on analysis of the previous year's demand. For the water year ending June 30, **2005**, total water use by all three water purveyors was **4.7 percent lower than** the preceding year.



CSA 10A is undertaking a program to replace water mains and increase storage based on the results of a recent water system assessment. This program will be phased over time based on available funding, and will result in increased reliability and improved fire flow.

A re-evaluation of CSA 10A water demand indicates that there may be enough supply to provide service to approximately 60 properties currently on the district's waiting list.

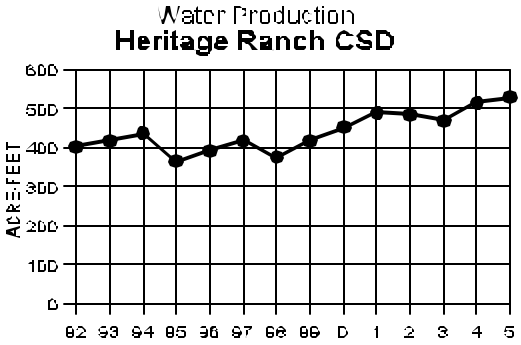
Level of Severity: II (Certified by the Board of Supervisors)

Recommended Actions: 1. Direct the Planning Department to continue to monitor water demand for the three water systems, based upon reports submitted by the water purveyors.
2. Continue conservation programs.
3. Continue to explore all possibilities for acquiring additional water supplies.

2005 UPDATE

The Board of Supervisors has issued a resolution to provide service to 40 customers on the CSA 10A waiting list. The Planning Department is contacting these customers to confirm their readiness to proceed. ■

Heritage Ranch



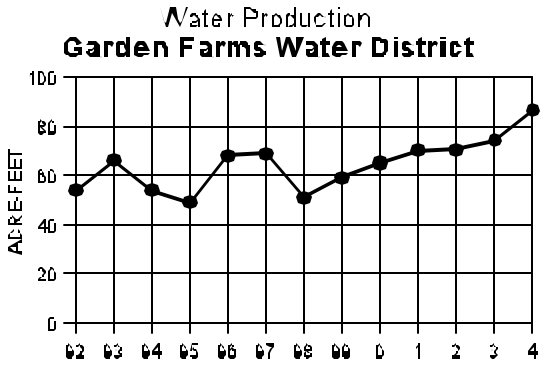
Lake Nacimiento is the only source of water for the Village of Heritage Ranch, for which there is an allotment of 1100 AFY. Water is supplied to village properties by the Heritage Ranch Community Services District. Because Nacimiento is a recreational lake and, therefore, subject to contamination, treatment is required before the water can be distributed to customers. The CSD operates a 2 million-gallon-per-day treatment plant that complies with state requirements. The District's has a 2 million-gallon storage tank.

Currently, the CSD has **1691** residential water connections. **175** "infill" parcels in current tracts remain to be developed. An additional **221** recently-created parcels are also available for development. The CSD estimates that the treatment plant is adequate for the 2900 units included in the Village of Heritage Ranch master plan. **However, a new water storage tank will be needed to handle full buildout.**

There is a concern that implementation of the Salinas Valley Water Project and the Nacimiento Water Project could, in drought years, reduce flows in the Nacimiento River to a point where the water supply would be inadequate to serve the community's needs. The CSD is currently considering options for participation in the Nacimiento project that would provide greater supply reliability during drought conditions.

Recommended Level of Severity: None

Garden Farms

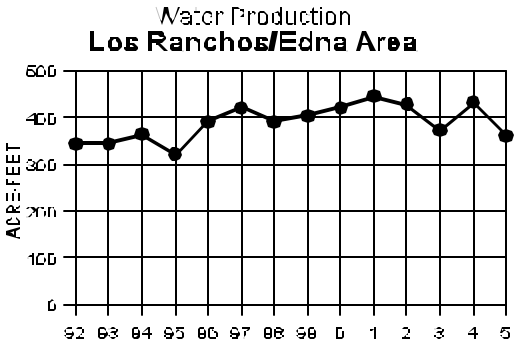


Garden Farms County Water District experienced diminished pumping capacity during the 1987-92 drought. Although the dependable yield of the groundwater source is unknown, there is a concern that demand may be approaching supply.

The District reports no water quantity problems for **2004-2005**. However, there exists no estimate of sustainable yield for the community's groundwater resource. The cost of a groundwater study of the Garden Farms/Santa Margarita area is too expensive for the two districts to fund by themselves. Beginning in 2000, the district began treating the water for iron and manganese.

Recommended Level of Severity: II

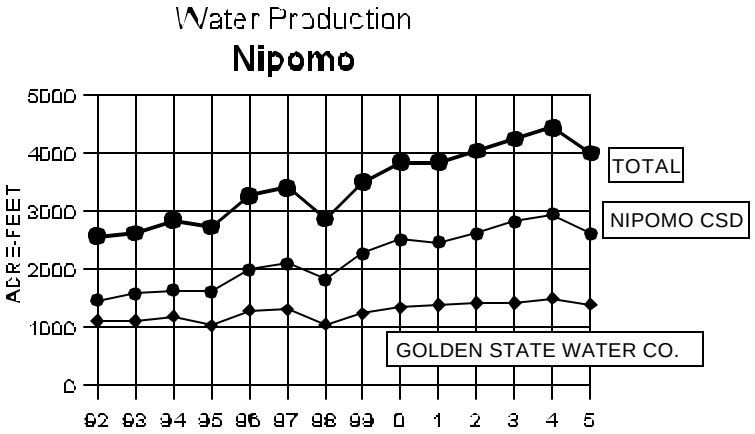
Los Ranchos/Edna Area



Golden State Water Company provides water to the San Luis Obispo Country Club and Rolling Hills areas from three wells drawing from the San Luis Obispo Creek groundwater basin. No level of severity is currently recommended for this system.

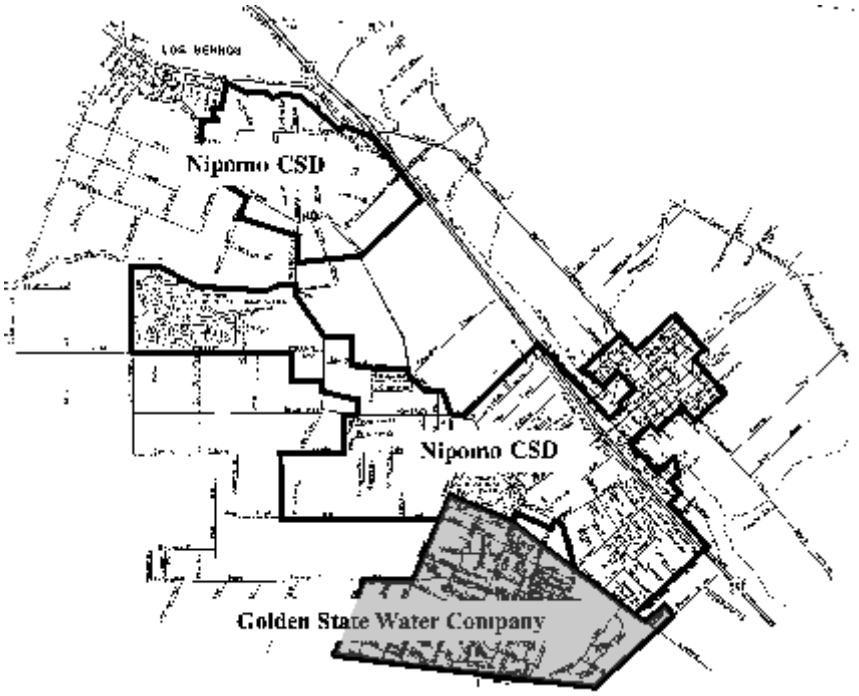
Recommended Level of Severity: None

Nipomo



Nipomo is served by two major water purveyors. The Nipomo Community Services District (NCSD) serves the original townsite east of Highway 101 and newer areas west of the highway, including the recently annexed Black Lake area. The Summit Station area, a non-contiguous area east of Los Berros, was also annexed by the NCSD in 1993.

Residents of the Summit Station area had long-standing concerns with falling water levels in their wells, a situation which has been relieved by tying in to the NCSD distribution system. Golden State Water Company serves an area south of Nipomo Regional Park.



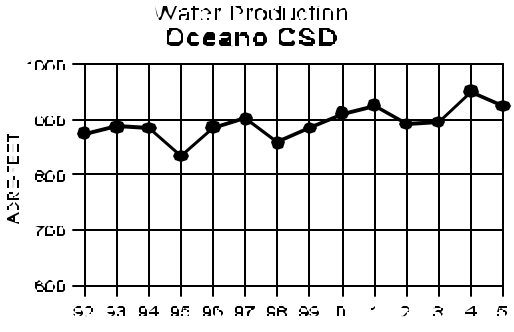
Nipomo Community Services District completed a one million gallon storage tank in 1993. Storage capacity was increased by an additional million gallons in 1999.

Neither the NCSD nor Golden State Water Company has applied for supplemental water, from either the State Water Project or the Nacimiento Project. However, the NCSD has entered into an agreement with the City of Santa Maria for 3,000 acre-feet per year of supplemental water. Water supply for the Nipomo Mesa area is discussed on pages 9, 10 and 11.

Recommended Level of Severity: None

Oceano

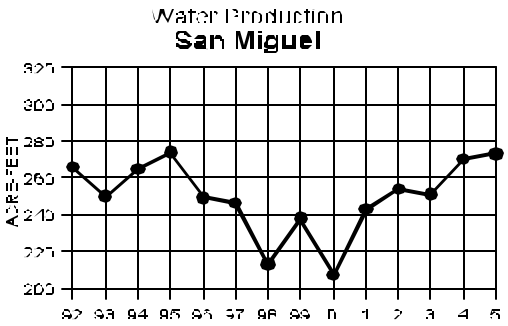
Water service in Oceano is provided by the Oceano Community Services District. As a member of the South San Luis Obispo County Water Association, the CSD is a party to the agreement by which the groundwater from the Arroyo Grande Tri-Cities Mesa area is shared with the cities of Arroyo Grande, Grover Beach and Pismo Beach, as well as with agricultural interests. The Oceano CSD share is 900 acre-feet per year (AFY). The CSD also contracts with the SLOCFC&WCD for 303 AFY from Lopez



Reservoir, plus its proportional amount of any surplus from the prior year. In addition, the Oceano CSD has contracted for 750 AFY from the State Water Project. For the current water year, the CSD's total production consisted of **60%** state water, **33%** Lopez water and **7%** groundwater.

Recommended Level of Severity: None

San Miguel

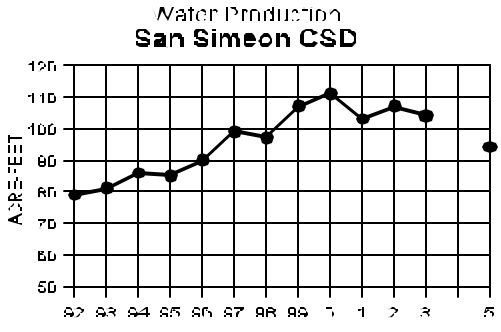


The San Miguel Community Services District was formed in 2001 and assumed responsibility for the community water system. The District completed a Water Master Plan in 2002. The Plan notes several system deficiencies, including low pressure in some areas and the need for increased storage capacity to meet fire flow requirements. The CSD's two main wells pump from the Paso Robles groundwater basin. The wells have a combined pumping capacity to serve San Miguel's existing buildout. Construction of a new well is planned for **2006**. A new storage tank is also scheduled for construction in the 2005-06 time period.

San Miguel's growth rate has increased significantly in the last two years, to the point at which demand could equal or exceed the current system capacity within five years. Therefore, Level of Severity II is recommended. This recommendation will be reconsidered when the new well is on-line and its pumping capacity has been determined.

Recommended Level of Severity: **II**

San Simeon



The community of San Simeon is served by two wells along Pico Creek. Recent data indicate that dependable yield from this groundwater source is between 120 and 130 AFY. Historically, San Simeon Community Services District has pumped as much as 140 acre-feet per year. Except for water used for irrigation, this water is fully consumed - none of the wastewater returns to the groundwater basin. San Simeon has been under a self-imposed building moratorium since December 1986, based upon the potential for total consumption of

available water supplies.

The CSD reported in June, 1991 that water use was reduced by approximately 50 percent - 20 percent due to the prohibition on landscape irrigation and 30 percent due to the plumbing retrofit program. Water use has continued at a reduced rate since that time. However, the building moratorium remains in place. The SSCSD Board may consider relaxing some water use restrictions as usage stabilizes at some level less than the reliable supply.

In October, 1994, the SSCSD board passed a drought management ordinance in response to information that the water levels in the district's wells had dropped to near sea level, raising the prospect of sea water intrusion. The emergency restrictions ban outdoor irrigation and the washing of vehicles, sidewalks, driveways parking lots and structures. This action underscores the tenuousness of the district's water supply.

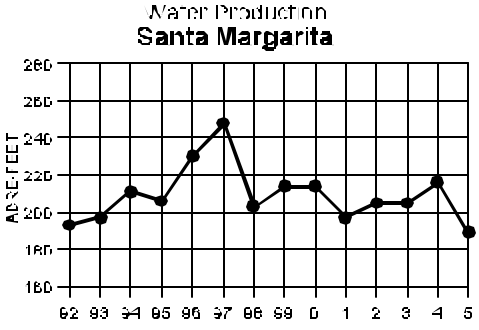
Additional water sources have been studied, including desalination, surface storage, wastewater reclamation and a cooperative arrangement with the Cambria CSD involving groundwater recharge. The SSCSD had initially considered the importation of supplemental water from Lake Nacimiento, but has dropped out of the project because of the high projected cost of the water from that source.

In October, 2001, the SSCSD enacted an emergency water conservation ordinance, similar to the 1994 ordinance, based on declining well levels which pose a risk of seawater intrusion. The ordinance prohibits the use of district water for landscape irrigation, washing vehicles, sidewalks and driveways. Restaurants may serve water to customers only by request.

Recommended Level of Severity: III

Recommended Actions: 1.Continue the moratorium. 2. Continue conservation activities.

Santa Margarita



In September, 1990, declining water levels in the County Service Area #23's two wells created concern that the community could run out of water before the beginning of the rainy season. Residents were asked to reduce consumption until the wells were replenished by rain. Because consumption exceeded the system's delivery capabilities in a year of below average rainfall, Santa Margarita was considered to be at Level of Severity III.

In 1993 and 1994, the water district added a new 100 gpm well and a 157,500 gallon storage

tank, funded by a Safe Drinking Water Bond Law construction loan.

In 1996, when it was realized that two of Santa Margarita's wells did not meet newly adopted design standards, a new well was constructed. However, operational experience with the new well led to a conclusion that supplemental water is necessary to ensure the reliability of the system. Conservation measures have been effective but will not be sufficient to avoid the need for supplemental water.

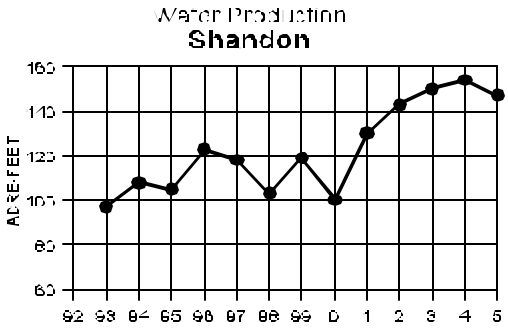
Work with the community on water needs is on-going. Since there are only a few vacant parcels remaining in the service area, a limit on new connections would have little significant impact. An emphasis on obtaining supplemental water supplies is recommended. In May, 2004 the Board of Supervisors directed staff to pursue cooperative development of water supply alternatives with Santa Margarita Ranch for CSA No. 23 and also to pursue State Water in conjunction with or independently of Santa Margarita Ranch.

Recommended Level of Severity: III

Recommended Actions: 1. Pursue acquisition of State Water cooperatively with Santa Margarita Ranch.

Shandon

County Service Area #16 serves the community of Shandon with two wells having a combined capacity of 800 gallons per minute. The wells supply a 212,000 gallon storage tank, completed in 2000.

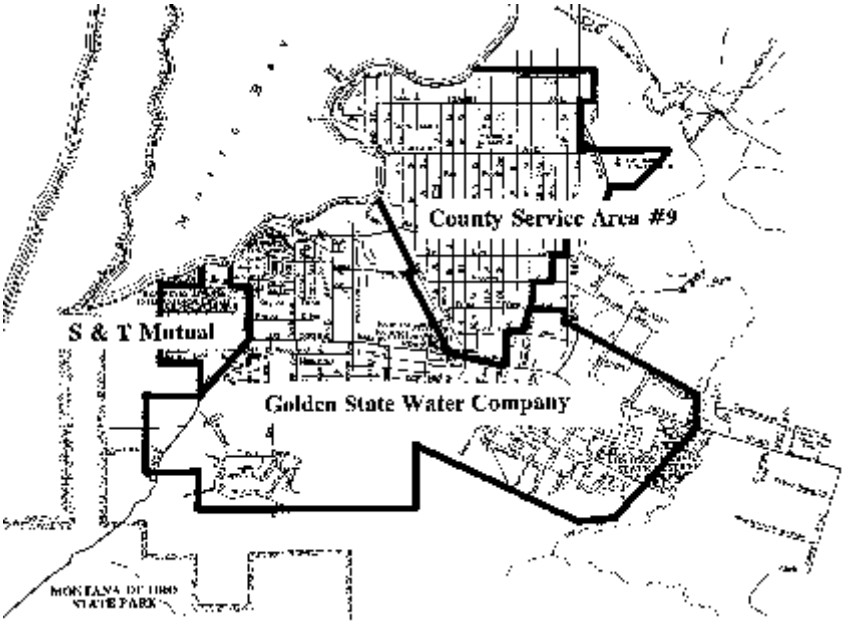


Groundwater levels in the Shandon area have been stable during the last forty years, indicating that the supply is adequate to meet community needs. Because the supply appears to be adequate, the sale of CSA #16's State Water allocation is proceeding.

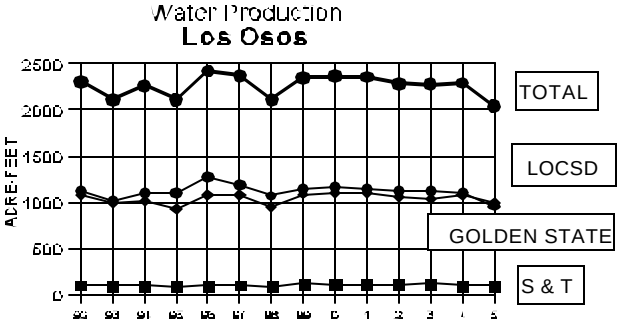
Proposals for general plan amendments have been received that would dramatically increase Shandon's population and the demand for public services. Consideration of water supply options would be included in the EIR process. A draft EIR is tentatively scheduled to be available for public review in 2006.

Recommended Level of Severity: None

Los Osos



The Los Osos area is served by three water purveyors, the Los Osos Community Services District (LOCSD), Golden State Water Company and S & T Mutual Water Company. Because these agencies pump groundwater from a coastal basin, the potential for seawater intrusion is always a consideration when discussing the issue of system capacity. Some municipal wells are within 2000 feet of the Morro Bay shoreline. The LOCSD's **Water Management Plan** indicates that seawater intrusion **is** taking place in portions of the groundwater basin in which production wells are located. **The management plan includes a revised estimate of the basin's safe yield which indicates that there is not enough water available to serve the Los Osos buildout population.** Seawater intrusion could be eliminated or greatly reduced by decreasing production from some wells near the coast and increasing production from wells in other portions of the basin.



The buildout shortfall could be made up by implementing a variety of programs, including the use of recycled water for irrigation of large turf areas such as school grounds, parks and Sea Pines golf course, **an aggressive water conservation effort and importation of supplemental water from outside the basin. The management plan identifies construction of a sewer system as a key element in achieving a long-term sustainable water supply for Los Osos. A sewer system will improve water quality in the upper aquifer and will allow reduced pumping from the lower aquifer where seawater intrusion is taking place.**

Based on the information in the LOCSD Water Management Plan regarding seawater intrusion and current exceedence of the basin's safe yield, Level of Severity III is recommended for Los Osos, See the discussion on page 11 for additional details.

Both LOCSD and Golden State Water Company have discontinued their participation in the current phase of the Nacimiento Project.

Recommended Level of Severity: III

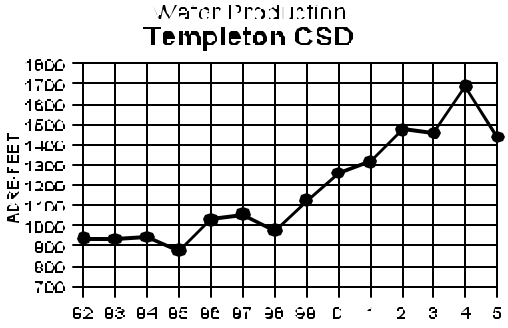
Recommended Actions:

1. The LOCSD should consider adopting an aggressive water conservation program that would have the potential for achieving water savings significantly greater than the 8% conservation factor contained in the Water Management Plan. As water demand decreases, pumping from the lower aquifer should be commensurately reduced.

2. Water purveyors should consider adopting limits on the issuance of will-serve letters until overdraft of the lower aquifer ceases and further seawater intrusion is stopped.

3. The LOCSD should identify sources of supplemental water and proceed with an acquisition program.

Templeton



The Templeton Community Services District (TCSD) water system operates with eleven wells having a combined pumping capacity of **2,500** gpm. Nine of the wells pump from the groundwater basin (safe yield = 1050 AFY). Two wells pump from the underflow of the Salinas River (500 AFY appropriative right plus 102 AFY by permit = 602 AFY). TCSD estimates that its existing capacity could serve a population of 6,000. This figure includes the existing population plus the additional estimated population resulting from the development of existing vacant lots within the district boundaries. Since 1990, Templeton's annual growth rate has been approximately 3.8 percent. At this rate, it is estimated that a population of 6,000 would be reached in about 2008. **As of 2005, the District had allocated all of its current capacity, and had a backlog of approximately 86 requests for service, for a total of 1,084 water units.**

TCSD has hired a Water Conservation Coordinator to oversee and implement lpublic water conservation programs, lawn audits and school presentations. The District instituted an off-site plumbing fixture retrofit program in 1994, that has allowed the issuance of will-serve letters to participating applicants. Exploration for new sources of groundwater is continuously being undertaken. Construction of a new 1,000,000 gallon water storage tank is scheduled for

completion in **2006**. **The district has approved a contract for 250 AFY of supplemental water from the Nacimiento Project.**

Recommended Level of Severity: II

Recommended Actions: 1. Water supply should be carefully monitored as development proceeds. TCSD should continue its policy of not issuing will-serve letters that cannot be guaranteed water from existing supplies.
2. The District should continue efforts to develop new water supplies.

Community Water Supply and Distribution, 2005
Recommended Levels of Severity (RLOS)

Community	RLOS		Reason
	SUPPLY	SYSTEM	
Avila Beach	**None**	**None**	
Cambria	**III**	**III**	Seasonal supply shortage, storage capacity
Cayucos	**II**	**II**	LOS II for supply certified by Board of Supervisors LOS II for system based on CSA#10A allocation
Garden Farms	**None**	**II**	Inadequate pumping capacity during drought
Heritage Ranch	**None**	**None**	
Los Ranchos/Edna	**II**	**None**	Possible basin overdraft (SLO Creek)
Nipomo	**III**	**None**	LOS II certified by Board of Supervisors
Oceano	**None**	**None**	
S.Miguel	**None**	**II**	Demand is approaching pumping capacity
San Simeon	**III**	**III**	CSD moratorium; supply uncertainty during drought
Santa Margarita	**III**	**III**	Supply uncertainty; backup deficiency
Shandon	**None**	**None**	
Los Osos	**III**	**III**	Overdraft and current seawater intrusion
Templeton	**None**	**II**	Supply fully allocated

MUNICIPAL WATER CONSERVATION IN SAN LUIS OBISPO COUNTY, 2004-2005

Throughout California, efficient management of water resources is becoming a necessity. People have become sensitive to the environmental consequences of transporting water from one part of the state to another. Resolution of the Mono Lake issue and progress toward solving the problems of the Sacramento/San Joaquin Delta has caused the Metropolitan Water District of Southern California to focus on development of local water resources to meet future demand. Conservation has become a crucial factor in fulfilling the region's water needs.

The situation in San Luis Obispo County is similar. We are now importing water from the State Water Project and, in the future, we may also be moving water from Lake Nacimiento to population centers in other parts of the county. At some point, this "new" water will be fully committed, and we, too, will be looking to local solutions to meet future demand.

Anticipating the growing importance of water conservation in the county's water supply equation, the Board of Supervisors, in 1990, adopted a water policy called "The Responsible Use of Water", which had been prepared and recommended by the Water Resources Advisory Committee (WRAC). The policy envisions that "through systematic implementation of local water conservation programs, and through the widespread dissemination of this policy statement, residents and businesses in this county will better understand the importance of water conservation and take appropriate individual actions to assist the County and its water purveyors in implementing these policies". Specific water conservation measures recommended in the policy are listed in the table on the following page, along with the percentage of the county's water purveyors who are currently implementing each measure.

The following water purveyors are implementing at least eight of the 15 conservation measures listed in the table: Atascadero Mutual Water Co. (13), City of San Luis Obispo (12), Cambria CSD (10), Templeton CSD (8), City of Grover Beach (8), Los Osos CSD (8), Nipomo CSD (8) . Atascadero Mutual Water Co and Nipomo CSD accounted for a total of 869 acre feet of reclaimed wastewater in 2004-05.

Conservation Measure	Percentage of Purveyors Implementing Each Conservation Measure, 2004-05 (10 20 30 40 50 60 70 80 90)	%
Purveyor provides leak detection assistance to customers		92%
Purveyor has an on-going leak detection and elimination program for water system		62%
Water bill inserts containing water conservation messages		62%
Water bills compare current use with previous year use and community-wide average		62%
Adopt conservation pricing: customers pay higher rate for higher water use		58%
Purveyor provides landscape water use audits for customers		50%
Provide water conservation information to applicants for new service		42%
Adopt an ordinance or regulations prohibiting wasteful outdoor water use		42%
Provide incentives for voluntary retrofit of ultra low-flow toilets, shower heads and faucets		31%
Provide information to public schools for use in conservation education programs		27%
Mandatory retrofit programs for new construction, or upon transfer of ownership		19%
Use of advertising in local newspapers to promote water conservation		15%
Purveyor personnel trained in turf management provide assistance to customers		11%
Use of television and radio advertising to promote water conservation		11%
Wastewater reclamation		8%